

SEQUENCE LISTING

<110> Jander, Georg

Baerson, Scott R

Durrett, Timothy P

<120> Plants with Imidazolinone-Resistant ALS

<130> 38-10 (15820) B

<150> US 60/257,480

<151> 2000-12-21

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<170> PatentIn version 3.1

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<211> 2013

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Val Leu Asn Thr Thr Thr Asn Val Thr Thr Thr Pro Ser Pro Thr Lys
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Arg Lys Gly Ala Asp Ile Leu Val Glu Ala Leu Glu Arg Gln Gly Val
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Glu Thr Val Phe Ala Tyr Pro Gly Gly Ala Ser Met Glu Ile His Gln
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and the *U.S. Geological Survey* (USGS) for the *U.S. Fish and Wildlife Service* (USFWS) and the *U.S. Environmental Protection Agency* (EPA) for the *U.S. Army Corps of Engineers* (USACE).

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Gln Gly Gly Val Phe Ala Ala Glu Gly Tyr Ala Arg Ser Ser Gly Lys			
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Val Met Asp Val Glu Asp Ile Pro Arg Ile Ile Glu Glu Ala Phe Phe			
225	230	235	240
Leu Ala Thr Ser Gly Arg Pro Gly Pro Val Leu Val Asp Val Pro Lys			
245	250	255	
Asp Ile Gln Gln Gln Leu Ala Ile Pro Asn Trp Glu Gln Ala Met Arg			
260	265	270	
Leu Pro Gly Tyr Met Ser Arg Met Pro Lys Pro Pro Glu Asp Ser His			
275	280	285	
Leu Glu Gln Ile Val Arg Leu Ile Ser Glu Ser Lys Lys Pro Val Leu			
290	295	300	
Tyr Val Gly Gly Cys Leu Asn Ser Ser Asp Glu Leu Gly Arg Phe			
305	310	315	320
Val Glu Leu Thr Gly Ile Pro Val Ala Ser Thr Leu Met Gly Leu Gly			
325	330	335	
Ser Tyr Pro Cys Asp Asp Glu Leu Ser Leu His Met Leu Gly Met His			
340	345	350	
Gly Thr Val Tyr Ala Asn Tyr Ala Val Glu His Ser Asp Leu Leu Leu			
355	360	365	
Ala Phe Gly Val Arg Phe Asp Asp Arg Val Thr Gly Lys Leu Glu Ala			

370

375

380

Phe Ala Ser Arg Ala Lys Ile Val His Ile Asp Ile Asp Ser Ala Glu
 385 390 395 400

Ile Gly Lys Asn Lys Thr Pro His Val Ser Val Cys Gly Asp Val Lys
 405 410 415

Leu Ala Leu Gln Gly Met Asn Lys Val Leu Glu Asn Arg Ala Glu Glu
 420 425 430

Leu Lys Leu Asp Phe Gly Val Trp Arg Asn Glu Leu Asn Val Gln Lys
 435 440 445

Gln Lys Phe Pro Leu Ser Phe Lys Thr Phe Gly Glu Ala Ile Pro Pro
 450 455 460

Gln Tyr Ala Ile Lys Val Leu Asp Glu Leu Thr Asp Gly Lys Ala Ile
 465 470 475 480

Ile Ser Thr Gly Val Gly Gln His Gln Met Trp Ala Ala Gln Phe Tyr
 485 490 495

Asn Tyr Lys Pro Arg Gln Trp Leu Ser Ser Gly Gly Leu Gly Ala
 500 505 510

Met Gly Phe Gly Leu Pro Ala Ala Ile Gly Ala Ser Val Ala Asn Pro
 515 520 525

Asp Ala Ile Val Val Asp Ile Asp Gly Asp Gly Ser Phe Ile Met Asn
 530 535 540

Val Gln Glu Leu Ala Thr Ile Arg Val Glu Gln Leu Pro Val Lys Ile
 545 550 555 560

Leu Leu Leu Asn Asn Gln His Leu Gly Met Val Met Gln Trp Glu Asp
 565 570 575

Arg Phe Tyr Lys Ala Asn Arg Ala His Thr Phe Leu Gly Asp Pro Ala
 580 585 590

Gln Glu Asp Glu Ile Phe Pro Asn Met Leu Leu Phe Ala Ala Ala Cys
 595 600 605

Gly Ile Pro Ala Ala Arg Val Thr Lys Lys Ala Asp Leu Arg Glu Ala
 610 615 620

Ile Gln Thr Met Leu Asp Thr Pro Gly Pro Tyr Leu Leu Asp Val Ile
 625 630 635 640

Cys Pro His Gln Glu His Val Leu Pro Met Ile Pro Ser Gly Gly Thr
 645 650 655

Phe Asn Asp Val Ile Thr Glu Gly Asp Gly Arg Ile Lys Tyr
 660 665 670

<210> 27
<211> 31
<212> PRT
<213> *Arabidopsis thaliana*

<400> 27

Leu Glu Arg Gln Gly Val Glu Thr Val Phe Ala Tyr Pro Gly Gly Ala
1 5 10 15

Ser Met Glu Ile His Gln Ala Leu Thr Arg Ser Ser Ser Ile Arg
20 25 30

<210> 28

<211> 31
<212> PRT
<213> *Brassica napus*

<400> 28

Leu Glu Arg Gln Gly Val Glu Thr Val Phe Ala Tyr Pro Gly Gly Ala
1 5 10 15

Ser Met Glu Ile His Gln Ala Leu Thr Arg Ser Ser Thr Ile Arg
20 25 30

<210> 29

<211> 31

<212> PRT

<213> *Gossypium hirsutum*

<400> 29

Leu Glu Arg Glu Gly Val Lys Asp Val Phe Ala Tyr Pro Gly Gly Ala
1 5 10 15

Ser Met Glu Ile His Gln Ala Leu Thr Arg Ser Lys Ile Ile Arg

20

25

30

<210> 30
<211> 31

<212> PRT

<213> Nicotiana tabacum

<400> 30

Leu Glu Arg Glu Gly Val Lys Asp Val Phe Ala Tyr Pro Gly Gly Ala
1 5 10 15

Ser Met Glu Ile His Gln Ala Leu Thr Arg Ser Lys Ile Ile Arg
20 25 30

<210> 31

<211> 31

<212> PRT

<213> Glycine max

<400> 31

Leu Glu Arg Gln Gly Val Thr Asp Val Phe Ala Tyr Pro Gly Gly Ala
1 5 10 15

Ser Met Glu Ile His Gln Ala Leu Thr Arg Ser Ser Ser Ile Arg
20 25 30

<210> 32

<211> 31

<212> PRT

<213> Zea mays

<400> 32

Leu Glu Arg Cys Gly Val Arg Asp Val Phe Ala Tyr Pro Gly Gly Ala
1 5 10 15

Ser Met Glu Ile His Gln Ala Leu Thr Arg Ser Pro Val Ile Ala
20 25 30

<210> 33

<211> 31

<212> PRT

<213> *Arabidopsis thaliana*

<400> 33

Val Ala Ile Thr Gly Gln Val Pro Arg Arg Met Ile Gly Thr Asp Ala
1 5 10 15

Phe Gln Glu Thr Pro Ile Val Glu Val Thr Arg Ser Ile Thr Lys
20 25 30

<210> 34

<211> 31

<212> PRT

<213> *Brassica napus*

<400> 34

Val Ala Ile Thr Gly Gln Val Pro Arg Arg Met Ile Gly Thr Asp Ala
1 5 10 15

Phe Gln Glu Thr Pro Ile Val Glu Val Thr Arg Ser Ile Thr Lys
20 25 30

<210> 35

<211> 31

<212> PRT

<213> *Gossypium hirsutum*

<400> 35

Val Ala Ile Thr Gly Gln Val Pro Arg Arg Met Ile Gly Thr Asp Ala
1 5 10 15

Phe Gln Glu Thr Pro Ile Val Glu Val Thr Arg Ser Ile Thr Lys
20 25 30

<210> 36
<211> 31

<212> PRT

<213> Nicotiana tabacum

<400> 36

Val Ala Ile Thr Gly Gln Val Pro Arg Arg Met Ile Gly Thr Asp Ala
1 5 10 15

Phe Gln Glu Thr Pro Ile Val Glu Val Thr Arg Ser Ile Thr Lys
20 25 30

<210> 37

<211> 31

<212> PRT

<213> Glycine max

<400> 37

Val Ala Ile Thr Gly Gln Val Pro Arg Arg Met Ile Gly Thr Asp Ala
1 5 10 15

Phe Gln Glu Thr Pro Ile Val Glu Val Thr Arg Ser Ile Thr Lys
20 25 30

<210> 38

<211> 31

<212> PRT

<213> Zea mays

<400> 38

Val Ala Ile Thr Gly Gln Val Pro Arg Arg Met Ile Gly Thr Asp Ala
1 5 10 15

Phe Gln Glu Thr Pro Ile Val Glu Val Thr Arg Ser Ile Thr Lys
20 25 30